



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,875	05/08/2006	David Foster	DHN/360/PC/US	3290
2543 7590 03/09/2010 ALIX YALE & RISTAS LLP 750 MAIN STREET SUITE 1400 HARTFORD, CT 06103				
EXAMINER				
SORKIN, DAVID L.				
ART UNIT		PAPER NUMBER		
1797				
MAIL DATE		DELIVERY MODE		
03/09/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,875

Applicant(s)

FOSTER, DAVID

Examiner

DAVID L. SORKIN

Art Unit

1797

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,12,14 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,12,14 and 20-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 14, 20 and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Earle (US 5,975,751) in view of Stump (US 3,450,388). Regarding claim 1, Earle discloses an orthopedic cement mixing apparatus comprising a mixing chamber (414) and a cylindrical dispensing chamber (421), the mixing chamber having an outlet opening and the dispensing chamber having an inlet opening, the outlet opening and the inlet opening being arranged so as to allow cement mixed in the mixing chamber to pass into the dispensing chamber; closure means (431) having a first position separating the outlet opening of the mixing chamber and the inlet opening of the dispensing chamber; and means (443) for applying a vacuum to the mixing chamber and to the dispensing chamber; characterized in that the apparatus further comprises switching means (444, 446) for switching the applied vacuum between the mixing chamber and the dispensing chamber. The closure means is not a ball-like tap. Stump teaches a ball valve (131). It would have been obvious to one of ordinary skill in the art to have provided the apparatus of Earle with a ball valve to control discharge. Substituting the ball valve for the valve of Earle is a simple substitution with predictable results. Regarding claim 3, the dispensing chamber is a cylindrical body of a dispensing

syringe (see col. 3, lines 1-5). Regarding claim 14, Earle discloses an orthopedic cement mixing apparatus comprising a mixing chamber (414) and a dispensing chamber (421), the mixing chamber having an outlet aperture and the dispensing chamber having an inlet aperture, the outlet aperture and the inlet aperture being in cement flow communication; and closure means (154/158/431) for separating the inlet aperture and the outlet aperture to prevent flow of cement from the mixing chamber to the dispensing chamber, wherein the closure mean is movable between a closed position whereby flow of cement from the mixing chamber to the dispensing chamber is prevented and an open position whereby cement can flow from the mixing chamber to the dispensing chamber. A ball-like tap is not disclosed, instead valve (431) is disclosed. Stump teaches a ball valve (131). It would have been obvious to one of ordinary skill in the art to have provided the apparatus of Earle with a ball valve to control discharge. Substituting the ball valve for the valve of Earle is a simple substitution with predictable results. Regarding claim 20, the apparatus of Earle is capable of being used in the manner discussed in the claim. Regarding claim 21, the dispensing chamber is a cylindrical body of a dispensing syringe (see col. 3, lines 1-5).

3. Claims 4-6, 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Earle (US 5,975,751) in view of Foster (WO 01/56514). Relevant teachings of Earle (US 5,975,751) are set forth above. Earle further discloses a rotatable tap (431) between said mixing chamber and said dispensing chamber, rotatable between first and second positions. A gear mechanism arranged such that rotation of a handle causes a paddle to rotate about its own axis and also moves the

axis of rotation of the paddle is not disclosed. Foster (WO 01/56514) discloses a mixing paddle (3) extending into said mixing chamber and a rotatable handle (5) coupled to said paddle by a gear mechanism (8,10) arranged such that rotation of said handle causes said paddle to rotate about its own axis and also moves the axis of rotation of the paddle within the chamber whereby the paddle is moved around substantially the entire cement containing region of the interior of the chamber. It would have been obvious to one of ordinary skill in the art to have provided the paddle of Earle with a planetary drive as taught by Earle to improve mixing.

4. Claims 4-6, 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Earle (US 5,975,751) in view of Foster (WO 01/56514), and further in view of Stump (US 3,450,388). While as stated above it is considered that these claims are obvious over Earle (US 5,975,751) in view of Foster (WO 01/56514) taken alone, it would have also been obvious to substitute the ball valve (131) of Stump for the valve (431) of Earle to control flow. Substituting the ball valve for the valve of Earle is a simple substitution with predictable results.

Response to Arguments

5. While applicant is correct that Earle (US 5,975,751) does not disclose a ball valve, substituting one known valve for another would have been obvious to one of ordinary skill in the art.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID L. SORKIN whose telephone number is (571)272-1148. The examiner can normally be reached on Mon.-Fri. 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter D. Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DAVID L. SORKIN/
Primary Examiner, Art Unit 1797